

CIGARETTE AND FILTER WITH DOWNSTREAM FLAVOR ADDITION

Abstract of the Disclosure

A cigarette comprises a tobacco rod and a multi-component filter comprising a bed of adsorbent and a flavor-releasing filter segment located downstream of the bed of adsorbent. In the preferred embodiment, the adsorbent is also flavor-bearing and comprises high surface area, activated carbon. As mainstream smoke is drawn through the upstream portion of the filter, gas phase smoke constituents are removed and flavor is released from the adsorbent bed. Thereafter additional flavor is released into the mainstream smoke as it passes through the flavor-releasing filter segment. Ventilation is provided to limit the amount of tobacco being combusted during each puff and is arranged at a location spaced downstream from the adsorbent bed to lower mainstream smoke velocity through the adsorbent bed. Preferably, the carbon bed comprises at least 90 to 120 mg or greater of carbon in a fully filled condition or 160 to 180 mg or greater of carbon in a 85 filled condition or better, which in combination with other features provides a flavorful cigarette that achieves significant reductions in gas phase constituents of the mainstream smoke, including 90% reductions or greater in 1, 3 butadiene, acrolein, isoprene, propionaldehyde, acrylonitrile, benzene, toluene, styrene, and 80% reductions or greater in acetaldehyde and hydrogen cyanide.